

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Streamlining Deployment of Small Cell)	WT Docket No. 16-421
Infrastructure by Improving Wireless Facilities)	
Siting Policies)	
)	
Mobilitie, LLC Petition for Declaratory Ruling)	

COMMENTS OF CARY, NORTH CAROLINA

These Comments are filed by Cary, North Carolina in response to the Public Notice, released December 22, 2016, in the above-entitled proceeding. Cary, by its counsel, filed comments in WT Docket 16-421 as part of the Smart Communities local government coalition.¹ Cary files these additional comments in support of the Bureau’s goal of achieving a data driven process that “accord[s] greater weight to systematic data” versus “merely anecdotal evidence.”² Cary believes that the systematic data provided in this proceeding will document that there is no predicate for Commission action.

INTRODUCTION

Cary, North Carolina (“Cary”) urges the Commission to exercise caution as it works to enable the widespread deployment of small cell infrastructure throughout the nation. Cary opposes a federal one-size-fits all preemption of local siting authority, and asks the Commission to consider carefully the many differences between communities that necessitate local decisions: variation in state statute, geographic challenges, climate variations, size, budgetary and staff resources, aesthetic character, the type and amount of existing infrastructure, and more. Including local government creates opportunities to maximize public benefit, complement existing public infrastructures and the services that local governments provide, and help create smarter cities. Small cell technology can improve services that are critical to everyday life such as water, sewer, street maintenance, and street lighting, and many more. For this to occur we believe that the experts in cities managing these systems need to be at the table. We ask the Commission to avoid placing any further restrictions on cities as they collaborate with their local wireless carriers and infrastructure providers to integrate this very new technology, and very new approach to infrastructure development, into their planning and zoning processes in a way that preserves, enhances, and protects the finite rights-of-way belonging to their residents.

Cary has grown from approximately 8,000 residents in 1970 to more than 160,000 today, and is now known as one of the best mid-sized communities in the nation to live and work, to find a home or start a

¹Comments of Smart Communities (filed March 8, 2017).

²Public Notice at 9.

business, and to raise a family or retire. Cary is located in the heart of the Research Triangle Region of North Carolina, located adjacent to Raleigh and a short drive from Durham and Chapel Hill. The entire region is growing rapidly and was estimated to have a population of over two million people in 2015.

As stated in the Cary Community Plan³, the new comprehensive plan for Cary adopted on January 24, 2017:

Technology will play an increasingly important role in future communities by promoting economic development and enhancing consumer choices by diversifying modes of communication, improving efficiency in services and utility through the smart grid, and extending high speed internet access. Google has announced plans to install a fiber-optic networks in select cities across the United States, which boasts internet speeds up to 100 times faster than traditional broadband. In January 2015 Google selected Cary as one of its next communities for fiber deployment and in June 2015 construction began on its fiber network in the Triangle. AT&T's gigabit speed service update also provides a fiber-optic network within the town. In addition to deploying smart water meters to all of its customers through the Aquastar Program, Cary is a municipal participant in the North Carolina Next Generation Network, a regional initiative focused on stimulating the deployment of next generation broadband networks primarily focused on business and education in North Carolina.

Cary specifically adopted a policy as part of the Cary Community Plan that states:

Support the provision of high speed and affordable communication services – such as digital and wireless – for businesses and community members throughout Cary.

The intent of this policy is to allow for the provision of high quality, affordable, and competitive communication services for personal and business use by working with providers to expand fiber networks, advocating for efficient delivery of services on behalf of local consumers, and continuing to be an active member in the NC Next Generation Network. The intent of this policy also provides support for wireless technologies.

Every major wireless provider in the country currently serves Cary. Wireless coverage in Cary is exceptional due to its central location the Triangle Region. There are many vertical assets (monopoles, water tanks, buildings, stealth towers, etc.) located in Cary where wireless carrier antennas are installed.

Cary owns two monopoles and four water tanks upon which Verizon, AT&T, Sprint, Clearwire, T-Mobile, and Cricket Wireless currently have multiple antennas. Cary has collaborated with carriers on these sites since 1996 to provide the best wireless service to Cary's citizens. Cary's staff also utilizes wireless and wired services from three of these carriers, so it's in Cary's best interest to assist with the expansion of these networks. Cary has additional facilities, parks, and vertical infrastructure available for wireless service expansion.

³ The Cary Community Plan is available on the Cary website: <http://www.townofcary.org/projects-initiatives/cary-community-plan>

To date, Cary has received only one complete application for a small cell facility (by Fibertech) which is being processed now and is likely to be approved in the very near future. Mobilitie mailed five applications to the Town in 2016 that were not submitted according to Town requirements, were not accompanied by the required application fee, and were woefully incomplete. The Town issued a Notice of Incompleteness for each application; the applications were not resubmitted. Since that time, Mobilitie, as well as T-Mobile, Verizon, Sprint and AT&T, have all expressed varying levels of interest in installing small cell facilities and Cary staff are in regular communication with each entity.

CARY PRACTICES DO NOT PROHIBIT OR HAVE THE EFFECT OF PROHIBITING PROVISION OF SERVICE

State laws such as N.C. Gen. Stat. §160A, Article 16A, effectively prevent North Carolina municipalities from directly providing broadband and wireless communications services to the community; therefore, cities and towns in North Carolina must rely even more heavily on the business decisions of private entities to fill this gap. In the last five years alone, Cary has approved twelve (12) telecommunication tower plans and eighteen (18) colocations on existing towers. All of these towers and colocations are located outside of the right-of-way. One of the telecommunication towers was a Town project on Town property; the others were constructed by private parties and/or utility companies on private property. In addition to those approvals, Cary has permitted at least twenty (20) colocations on the town-owned water tanks and monopoles mentioned above.

As briefly noted above, Cary has been diligently working with Fibertech, Mobilitie, T-Mobile, Verizon, and AT&T to discuss and begin the siting and application process for small cell and other facilities. While Fibertech has filed the only complete small cell application to date, Fibertech and Mobilitie have indicated they would like to each install around twenty sites in the near future. Cary is actively working with both entities to understand their requirements, and identify opportunities for maximum benefit. This new technology requires cities to determine how to apply or amend existing ordinances and procedures to facilitate introduction of the new technology to the community. Cary's original telecommunications ordinances were drafted at a time when wireless providers were focused on constructing traditional towers, and those ordinances have been amended over the years to make the permitting process easier and more predictable for wireless providers, while still protecting the public's interest.

This can be seen over the last several years with the construction of stealth towers in west and south Cary where wireless coverage was previously lacking. These structures would not have been possible under the original ordinance due to land availability, setbacks, and zoning requirements. During 2011, many workshops were held with Cary staff, representatives from wireless carriers, and citizens, to develop recommendations for amendments to the ordinance to help accommodate these structures. The Town is similarly willing to engage all interested parties in discussion regarding deployment of small cell and other new technologies.

Finally, Cary charges very minimal fees to review applications for wireless infrastructure. All application fees are cost-based, but are not set at a level that would enable full cost-recovery to the Town. There are no recurring charges for use of Town-owned right-of-way.

CITIES HAVE A PUBLIC DUTY TO MANAGE THE RIGHTS-OF-WAY

In North Carolina, municipalities and the North Carolina Department of Transportation share responsibility for protecting and regulating the use of the public right-of-way. In general, NCDOT maintains streets located outside of municipalities and the interstates and other similar routes that run through municipalities, while municipalities generally maintain the thoroughfares, collectors, and local streets within their boundaries.⁴ Cary currently maintains 470 miles of streets.

Streets Are For Everyone

Although commonly considered space for vehicles, streets and the public right-of-way are for everyone. In general, Cary's collectors and thoroughfares are designed to include five-foot sidewalks on both sides of the street to allow safe and comfortable walking for everyone, including those with disabilities; local streets may only include sidewalks on one side. For all street types, sidewalks are typically separated from the roadway by a five-foot grass buffer. Typically the right-of-way extends only one foot behind the sidewalk.

Water and sewer infrastructure, natural gas, electricity, and telecommunications facilities may also be present in the right-of-way, some located above-ground and some below-ground. As the community grows, demand for placement in the right-of-way increases. This raises safety concerns for pedestrians and motorists. Cary discourages location of new facilities above-ground.

Pedestrians, especially those that are disabled, need adequate space on the sidewalk to safely travel to their destinations. Proper placement of new facilities in the right-of-way is therefore crucial to ensuring pedestrian access is not comprised.

For vehicles, clear recovery zone compliance is important since fixed objects within the right-of-way can lead to an increase in the severity of crashes. As noted in AASHTO's "A Policy on Geometric Design on Highways and Streets", 6th Edition, pages 2-83 and 2-84:

Crashes involving single vehicles running off the road constitute more than one-half of all fatal crashes on freeways and other roadway types. When a vehicle leaves the roadway, the driver no longer has the ability to fully control the vehicle. Any object in or near the path of the vehicle becomes a potential contributing factor to crash severity. The concept of a forgiving roadside should not be independently applied to each design element but rather as a comprehensive approach to highway design.

* * *

⁴ For public streets in Cary, there are three major street types: thoroughfares, collectors, and local streets. Thoroughfares are larger streets that form the backbone of the transportation system in Cary, providing mobility to travel around Cary. Thoroughfares are designed to focus on mobility more than access. Local streets perform the opposite function; they are smaller, slower speed, and feature more driveways and intersections in order to provide access to businesses and homes. Collectors balance the two functions of access and mobility and provide linkages between local streets and thoroughfares. In the hierarchical street system, collectors collect traffic from local streets and distribute to thoroughfares. See Cary Community Plan, Chapter 7, MOVE.

Basic to the concept of the forgiving roadside is the provision of a clear recovery area. The unobstructed, traversable area beyond the edge of the traveled way known as the “clear zone” is for the recovery of errant vehicles.

Streetlights, utility poles, and traffic signal poles are frequently hit by vehicles. Antennas placed on new or existing structures in the right-of-way may continue to transmit even if the pole has been knocked to the ground. Power levels may exceed public exposure limits to those nearby. Further, intersection sight distance can become an issue if new facilities block a driver’s view of oncoming traffic.

Cary also reviews requests to install facilities in the right-of-way to ensure that new facilities will not compromise existing town-owned water, sewer, fiber, and other infrastructure (including the streets and sidewalks themselves) during construction or when built. New facilities must also be able to “fit” safely within the right-of-way, whether above- or below-ground, in relation to all the infrastructure already located there. Finally, Cary must ensure that new wireless facilities do not interfere with public safety communication channels. An intermode/interference study is a standard requirement for new antenna installations on Town-owned infrastructure (water tanks and monopoles). Any impacts to public safety communication channels from new installations could be dangerous and would be costly to correct.

Finally, while some wireless carriers have touted the desirability of small cell service in emergency situations as a public benefit, small cell sites generally do not have generators. It would be difficult to supply temporary generators at each site due to the available ground space in the right-of-way and the number of proposed locations. Tower sites located outside of the right-of-way have larger battery back-ups and typically have adequate ground space to install generators if needed.

Cary recognizes that small cell and other technologies offer opportunities to enhance the existing critical pieces of infrastructure in the right-of-way. To maximize these opportunities, we need the individuals who manage these systems daily to be fully vested in these new technologies, and we must be permitted to balance the benefits of the new technologies against their potential impacts to the right-of-way.

Cary’s Emphasis on Aesthetics Has Been a Large Part of its Appeal to Residents and Businesses

Cary is well-known as a community that offers a very high quality of life for its residents and workers. That quality of life is created in part by the many public and private amenities offered in the community, such as beautiful parks and greenways, recreation activities, access to first-rate health care, and abundant choices for shopping, dining, and services. Our high quality of life is also often defined in terms of our Town’s aesthetics, attention to community appearance, and the high quality of public and private development in our community. Historically, Cary’s major employers – as well as new large businesses relocating to Cary – have recognized the value and costs of meeting Cary’s development standards, in order to sustain and reinforce the prestige of their companies’ Cary locations.

Cary has required the placement of underground utilities for most new development for the last twenty-plus years. As described elsewhere in these comments, Cary has incentivized placement of stealth telecommunications towers to lessen visual impacts on the community. Cary is therefore concerned about the negative impacts that may result from new above-ground installations, especially those located in or near the public’s right-of-way and those that may be subject to Section 6409.

CARY IS WORKING PROACTIVELY TO DEPLOY WIRELESS INFRASTRUCTURE

As discussed above, Cary supports the provision of high speed and affordable communication services – such as digital and wireless – for businesses and community members throughout Cary and to support our smart city initiatives. To that end, Cary amended its Land Development Ordinance (“LDO”) in 2012 with input and support from wireless carriers to reduce set-back requirements for stealth towers and structures and convert requirements from (in many situations) governing board approvals of towers to administrative approvals. This helped facilitate carriers receiving approval for and installing sites in areas with poor service and capacity (primarily areas in west and south Cary).

In the summer of 2016, Cary again amended the LDO to clarify antenna placement on structures and to permit that both inside and outside the right-of-way. As noted elsewhere in these comments, Cary is actively working with Fibertech, Mobilitie, and others to find pathways to expedite reviews and speed deployment.

While not directly related to wireless service provision, since 2014 Cary has been proactively working with Google, AT&T, and Time Warner to effectuate their roll-out of gigabit fiber. Cary approved the placement of four Google fiber huts on Town property, and has negotiated Master Encroachment Agreements with all three entities that simplifies the permit application and approval process for encroachments into Town-owned right-of-way. This approach could be similarly employed for small cell facilities.

INDUSTRY SHOULD DO MORE VOLUNTARILY TO IMPROVE WIRELESS SITING

While Cary has developed a good working relationship with the entities that routinely submit applications for new telecommunications towers or colocations, we do still experience issues with submittals. For wireless carrier installations on Town-owned monopoles and water tanks, subcontractors have used old, unapproved plans or have not installed equipment according to the approved plan; construction schedules have not been followed; submittal information (plans, structural analysis, and interference study) may not match, leading to resubmittal and multiple reviews; and carriers sometimes delay installation once approval is granted.

As noted above, Mobilitie mailed five applications to the Town for installation of 120’ towers in the right-of-way. The Town was forced to respond with a Notice of Incompleteness for each application. In general, each application was confusing and ambiguous, as it was not clear exactly what type of facility was proposed. All five locations were purported to be for sites located in Town-owned right-of-way, but only two of the five were actually located in or near Town right-of-way. The Town prepared a detailed list of review comments that was approximately 17 pages long for each application. Some comments were procedural, as the applications were not submitted electronically and with the required review fee. Other comments were substantive, noting that it appeared the requested installation was in fact located outside of the right-of-way on private property. Town staff spent many hours reviewing the applications and compiling comments; because the applications were not properly filed, no application fee was collected and Mobilitie received a “free” review.

In recent months, Mobilitie has reached out to Cary in an effort to understand the proper submittal and review process and to work with Cary on siting facilities. These efforts are very much appreciated, but do not ameliorate Cary's concerns regarding placement of new wireless infrastructure in the public's right-of-way.

CONCLUSION

Cary would like to thank the Commission for its efforts to better understand the work being done at the local government level to ensure safe, responsible deployment of wireless infrastructure and to enhance the use of cutting edge technology in government. We strongly urge the Commission to consider our comments, as well as those submitted by communities across the country, before taking any action that may adversely affect the public's rights-of-way and may unintentionally limit collaboration between smart city partners.

Respectfully submitted,
Cary, North Carolina

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